

Quadrilateral Sort

Reporting Category Geometry

Topic Comparing and contrasting the properties of quadrilaterals

Primary SOL 7.7 The student will compare and contrast the following quadrilaterals based on properties: parallelogram, rectangle, square, rhombus, and trapezoid.

Materials

- Quadrilateral Sorting Pieces (attached)
- Quadrilateral Family Tree (attached)
- Quadrilateral Sort Activity Recording Sheet (attached)
- Graphic organizer
- Scissors
- Glue sticks
- Poster board or chart paper

Vocabulary

quadrilateral, parallelogram, rectangle, square, rhombus, trapezoid (earlier grades)

Student/Teacher Actions (what students and teachers should be doing to facilitate learning)

1. Place students into groups of three, and hand out the Quadrilateral Family Tree. Facilitate a review of quadrilaterals: parallelograms, rectangles, squares, rhombuses, and trapezoids.
2. Give each group a Quadrilateral Sort Activity Recording Sheet. Have groups brainstorm to identify attributes of quadrilaterals and list them in the “Quadrilateral Words” box.
3. Distribute one Quadrilateral Sorting Pieces sheet to each group, and have students cut out the quadrilaterals. Have each group sort the quadrilaterals into four categories, based on the attribute of their choice. If students would like to use a quadrilateral in more than one group, they can trace it and create a copy.
4. Once the quadrilaterals have been sorted, have each group create a poster onto which they will glue the quadrilaterals. Instruct students to include a description of the chosen attribute.
5. Ask students to share their posters with the class.

Assessment

- **Questions**
 - Why can some quadrilaterals be classified in more than one category?
 - Can a trapezoid ever be a parallelogram? Explain.
- **Journal/Writing Prompts**
 - Compare and contrast a rhombus and a square.
 - Write an explanation of how to complete the graphic organizer.
 - Explain why all squares are rectangles but not all rectangles are squares.

- Explain the relationships among a rectangle, a rhombus, and a square. Create a graphic organizer to show the relationships.
- **Other**
 - Given an attribute, ask students to locate all the quadrilaterals that have that attribute.

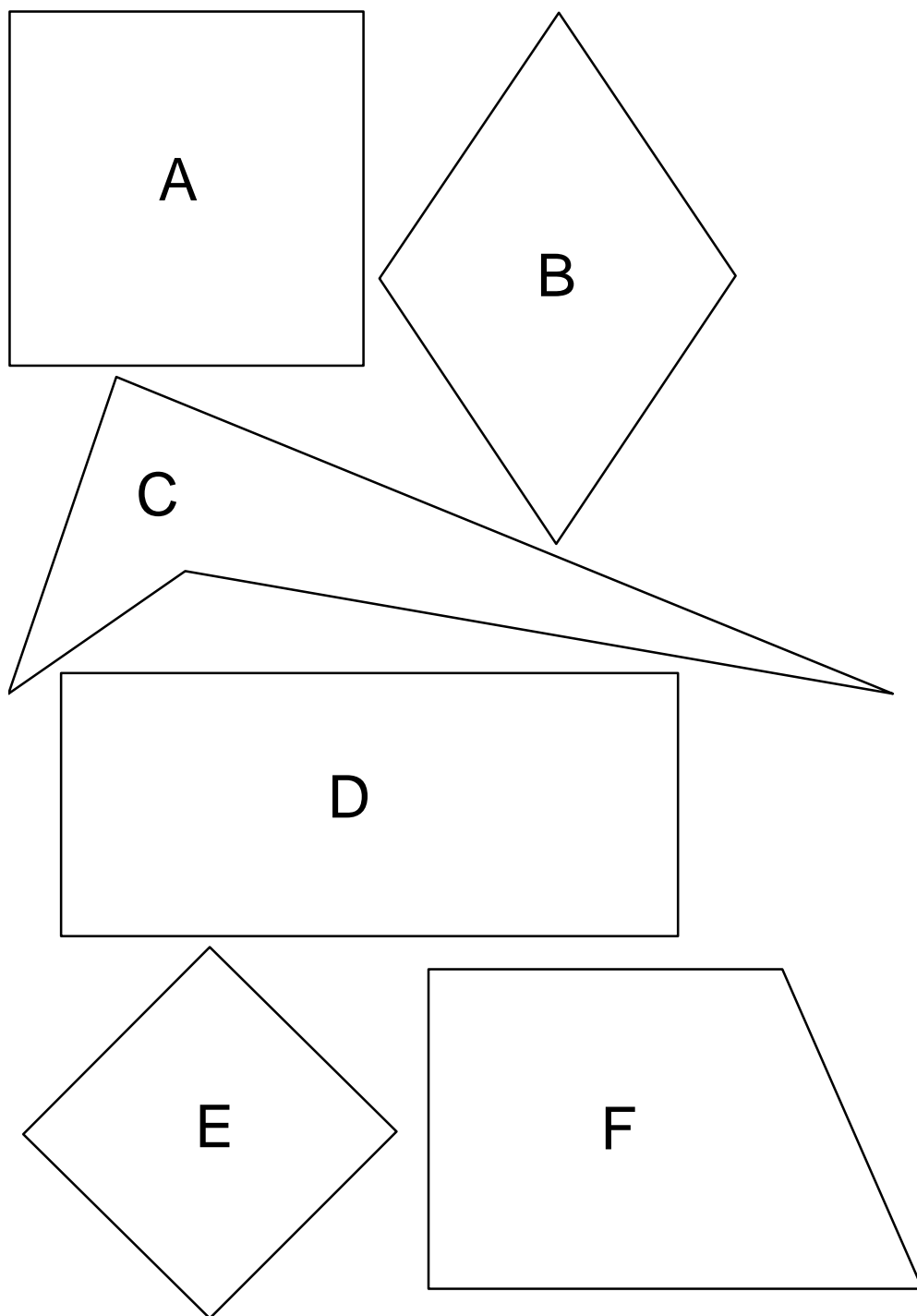
Extensions and Connections (for all students)

- Have students find practical uses for quadrilaterals.
- Have students create a design or picture, using only quadrilaterals.
- Have students create a story, poem, or graphic organizer that illustrates the relationships among the quadrilaterals.

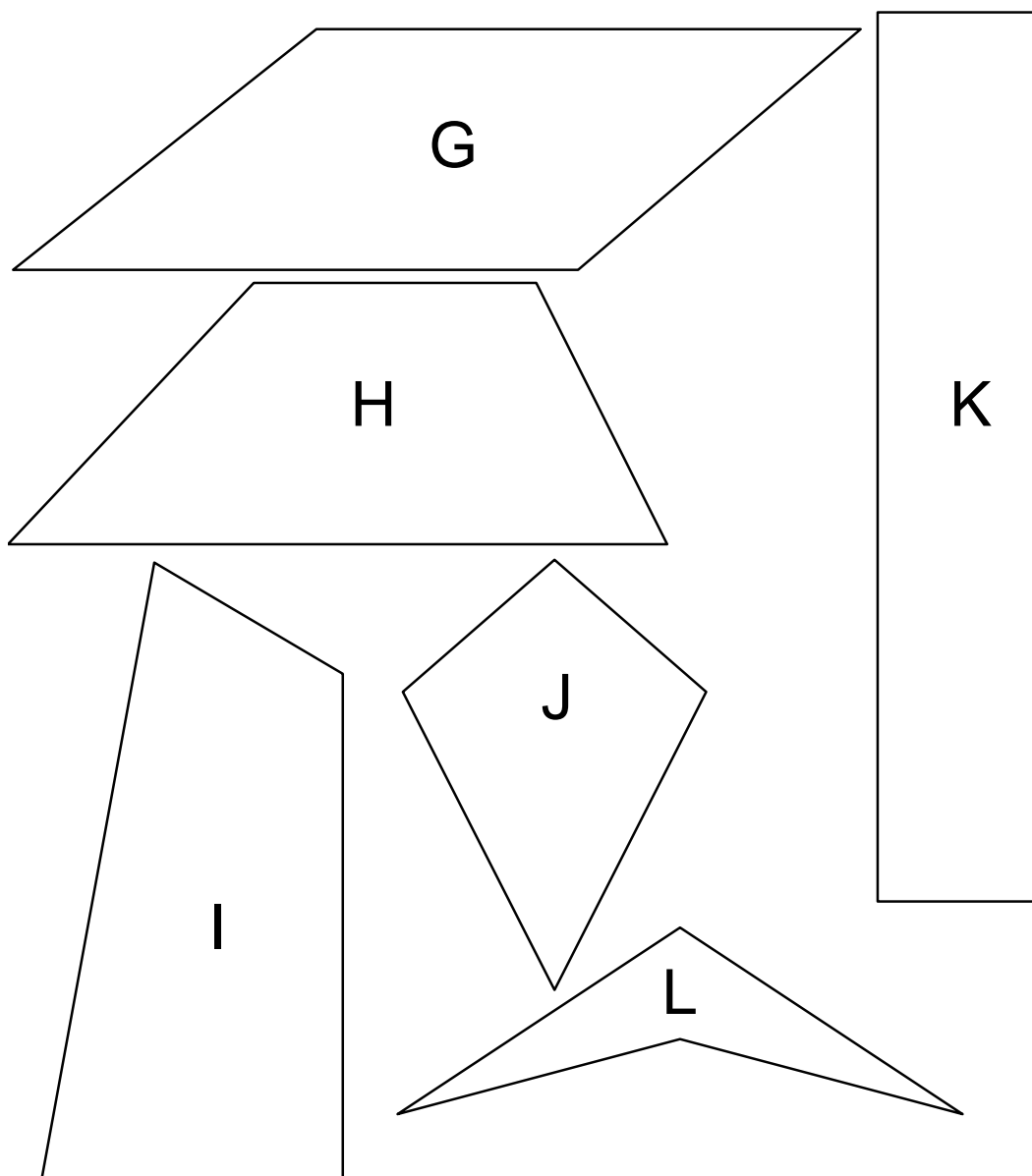
Strategies for Differentiation

- Use flashcards to review the name and the figure of each quadrilateral.
- Create characters for each quadrilateral (e.g., Sarah Square, Robby Rectangle, Tricia Triangle).

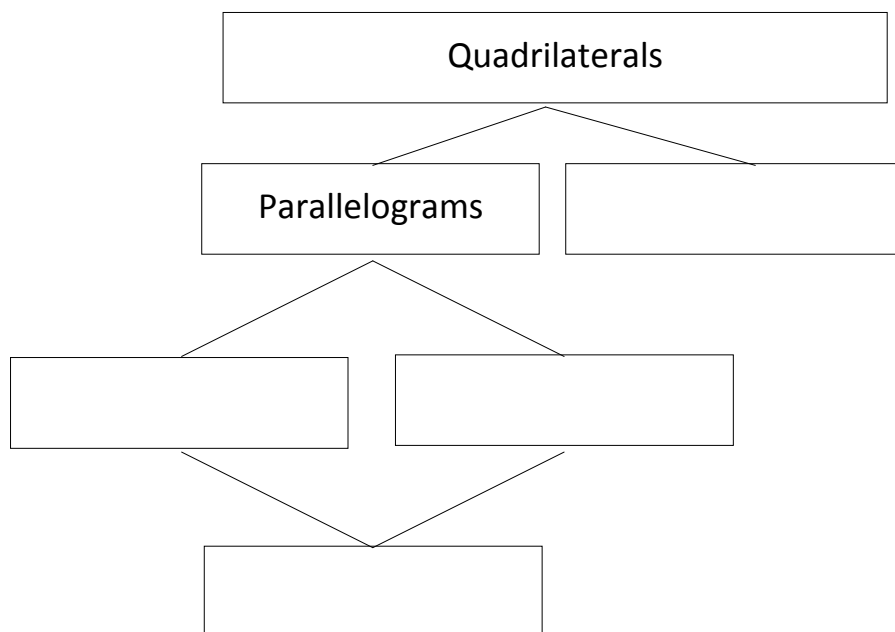
Quadrilateral Sorting Pieces



Quadrilateral Sorting Pieces



Quadrilateral Family Tree



Name _____ Date _____

QUADRILATERAL WORDS

1. Create a quadrilateral sort by arranging the quadrilaterals into groups that have common attributes. You will need to have at least four groups.
2. Underneath each group, describe the common characteristics shared by each item in the group. Use your vocabulary terms.
3. List the name of your favorite quadrilateral and tell why you like this quadrilateral more than any of the others.